IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Original): A microscope for observing a sample, comprising:

an optical system comprising an objective lens to which light from the sample is incident, and adapted to guide an image of the sample;

a solid immersion lens arranged movable between an insertion position including an optical axis from the sample to the objective lens, and a standby position off the optical axis;

solid immersion lens driving means for driving the solid immersion lens between the insertion position and the standby position and for adjusting the insertion position of the solid immersion lens relative to the objective lens; and

instructing means for issuing an instruction to adjust the insertion position of the solid immersion lens, with reference to an image containing reflected light from the solid immersion lens.

Claim 2 (Original): The microscope according to Claim 1, wherein the instructing means issues the instruction to adjust the insertion position of the solid immersion lens so that a position of a center of gravity of a reflected light image coincides with an observation location in the sample, with reference to the image containing the reflected light from the solid immersion lens.

Claim 3 (Original): The microscope according to Claim 1, wherein the instructing means issues an instruction to adjust a distance between the objective lens and the sample, along with the adjustment of the insertion position of the solid immersion lens.

Claim 4 (Original): A sample observation method of observing a sample, comprising:

a first image acquisition step of acquiring an observation image of a sample through an optical system comprising an objective lens to which light from the sample is incident;

an observation setting step of setting an observation location in the sample from the observation image;

a lens insertion step of moving a solid immersion lens from a standby position off an optical axis from the sample to the objective lens, to an insertion position including the optical axis;

a position adjustment step of acquiring an image containing reflected light from the solid immersion lens and adjusting the insertion position of the solid immersion lens relative to the objective lens, with reference to the image; and

a second image acquisition step of acquiring an observation image of the sample enlarged by the solid immersion lens, through the solid immersion lens and the optical system.

Claim 5 (Original): The sample observation method according to Claim 4, wherein the position adjustment step is to adjust the insertion position of the solid immersion lens so that a position of a center of gravity of a reflected light image coincides with the observation location

in the sample, with reference to the image containing the reflected light from the solid immersion lens.

Claim 6 (Original): The sample observation method according to Claim 4, comprising a distance adjustment step of adjusting a distance between the objective lens and the sample.

Claim 7 (Previously Presented): A semiconductor inspection method of acquiring an image of a semiconductor device and inspecting the semiconductor device, comprising:

a first image acquisition step of acquiring an observation image of a semiconductor device through an optical system to which light from the semiconductor device is incident;

an inspection setting step of setting an inspection location in the semiconductor device from the observation image;

a lens insertion step of moving a solid immersion lens from a standby position off an optical axis from the semiconductor device to the optical system, to an insertion position including the optical axis;

a position adjustment step of acquiring an image containing reflected light from the solid immersion lens and adjusting the insertion position of the solid immersion lens relative to the optical system, with reference to the image; and

a second image acquisition step of acquiring an observation image of the semiconductor device enlarged by the solid immersion lens, through the solid immersion lens and the optical system.

Claim 8 (Previously Presented): The semiconductor inspection method according to Claim 7, wherein the position adjustment step is to adjust the insertion position of the solid immersion lens so that a position of a center gravity of a reflected light image coincides with the inspection location in the semiconductor device, with reference to the image containing the reflected light from the solid immersion lens.

Claim 9 (Previously Presented): The semiconductor inspection method according to Claim 7, comprising a distance adjustment step of adjusting a distance between the optical system and the semiconductor device.

Claim 10 (Previously Presented): A sample observation method of observing a sample, comprising:

a position adjustment step of acquiring an image containing reflected light from a solid immersion lens through an optical system to which light from a sample is incident, and adjusting a position of the solid immersion lens relative to the optical system, with reference to the image; and

an image acquisition step of acquiring an observation image of the sample enlarged by the solid immersion lens, through the solid immersion lens and the optical system.

Claim 11 (Previously Presented): The sample observation method according to Claim 10, wherein the position adjustment step is to adjust the position of the solid immersion lens so that a position of a center of gravity of a reflected light image is positioned on an optical axis of

the optical system, with reference to the image containing the reflected light from the solid immersion lens.

Claim 12 (Previously Presented): The sample observation method according to Claim 10, comprising a distance adjustment step of adjusting a distance between the optical system and the sample.

Claim 13 (Previously Presented): The sample observation method according to Claim 10, wherein the solid immersion lens has a focal point located at the center of the sphere.

Claim 14 (Previously Presented): The sample observation method according to Claim 10, wherein the solid immersion lens, with a radius R and a refractive index n, has focal point located at the position R/n below the center of the sphere.

Claim 15 (Previously Presented): The sample observation method according to Claim 10, wherein the solid immersion lens, with a radius R and a refractive index n, has focal point located at a position between the center of the sphere and the position R/n below the center of the sphere.

Claim 16 (Previously Presented): The sample observation method according to Claim 10, wherein the sample is a semiconductor device, and the solid immersion lens is placed in close contact with a surface of the semiconductor device.

Claim 17 (New): A sample observation method of observing a sample, comprising:

a first image acquisition step of acquiring an observation image of a sample through an optical system to which light from the sample is incident;

an observation setting step of setting an observation location in the sample from the observation image;

a lens arrange step of moving a solid immersion lens from a standby position off an optical axis from the sample to the optical system, to a position including the optical axis; and

a second image acquisition step of acquiring an observation image of the sample enlarged by the solid immersion lens, through the solid immersion lens and the optical system.

Claim 18 (New): The sample observation method according to Claim 17, comprising a distance adjustment step of adjusting a distance between the optical system and the sample.

Claim 19 (New): The sample observation method according to Claim 17, wherein the sample is a semiconductor device, and the solid immersion lens is placed in close contact with a surface of the semiconductor device.